

REMARKS

Reconsideration and allowance of the present application are respectfully requested.

Claims 1-11 remain pending in this application. Claim 1 has been amended as supported in the present specification including at page 12, line 6 to page 14, line 25, Examples 1-9 (i.e., dispersions not containing resin substantially) and at page 4, lines 16-21 (i.e., formation of a "solid solution, or carried or coated on the surface of the tin oxide particles"). No new matter has been added.

At page 2 of the Office Action, the Examiner states that the references cited in the International Search Report (ISR) have been considered, but will not be listed because they were not provided on a separate PTO Form 1449. However, a PTO Form 1449 and copies of the ISR and five (5) cited references were filed along with the present application on February 28, 2002. A copy of the PTO dated stamped filing receipt is attached to this Amendment along with a copy of the Form 1449 filed February 28, 2002, which proves that the PTO received the Form 1449 and copies of ISR and cited references. The Form 1449 and copies of references were apparently lost by the PTO.

The applicants respectfully traverse the rejection of claims 1, 2, 5, 6, 8, 9 and 11 under 35 USC 102(b) or 35 USC 103(a) in view of JP 1-261,469 (JP '469).

The applicants traverse the rejection of claims 3, 4 and 7 under 35 USC 103(a) in view of JP '469.

The applicants further traverse the rejection of claims 1-11 under 35 USC 103(a) in view of Suezaki et al.

None of the cited references anticipate the presently claimed invention or make it obvious.

The presently claimed invention includes an organic solvent-based dispersion of conductive powders comprising an organic solvent-based medium as a dispersion medium, tin oxide powders coated with an organic metal coupling agent at the surface of tin oxide particles. The claimed invention further includes a dispersant in which for the purpose of improving dispersibility of the tin oxide powders, at least one oxide, selected from the group consisting of silicon, tungsten, zirconium and aluminum, is incorporated into the tin oxide particles to form a solid solution, or carried or coated on the surface of the tin oxide particles.

According to the above noted features of the presently claimed invention, the conductive tin oxide powders of high concentration are effectively dispersed in the medium even without resin. When a paint film is formed using the dispersion which contains the conductive tin oxide powders of high concentration, the paint film has excellent conductivity, transparency and physical properties such as hardness.

In contrast, when silicon, tungsten, zirconium or aluminum is not used, dispersibility of the tin oxide powders becomes poor, and the surface resistivity, haze percentage and pencil hardness of the paint film are poor.

The cited references, JP '469 and Suezaki et al. disclose a conductive paint which comprises an organic solvent-based medium as a dispersion medium, tin oxide powders coated with an organic metal coupling agent at the surface of tin oxide particles, dispersant and binder resin (vehicle).

In contrast to the presently claimed invention, however, these references do not disclose nor suggest that at least one oxide selected from the group consisting

of silicon, tungsten, zirconium and aluminum is incorporated into the tin oxide particles to form a solid solution, or carried or coated on the surface of the tin oxide particles. Additionally, the effect obtained by these features (for example, the conductive tin oxide powders of high concentration are effectively dispersed in the medium even without resin) are not suggested by JP '469 and Suezaki.

While the applicants believe that the features of the presently claimed invention sufficiently distinguish over the teachings of the cited references, the applicants have performed tests that show new and unexpected results of the presently claimed invention. A description of the tests and test results are set forth in a Rule 132 Declaration that is attached to this Amendment.

The Examiner is asked to carefully read the attached Rule 132 Declaration.

In the attached Declaration, the tests compared the dispersibility of the organic solvent-based dispersion and the transparency, conductivity and adhesion of the paint formed according to the presently claimed invention (Sample A) and a control dispersion (Sample B) and a control paint (Sample C). The results are set forth in Table 1. The results show that the presently claimed invention (Sample A) provides for all of good dispersion, low resistivity, low haze and high hardness in contrast to the other samples.

Accordingly, the applicants submit the presently claimed invention shows new and unexpected results.

The presently claimed invention is nowhere disclosed, suggested or made obvious by the cited references. The applicants submit that the presently claimed invention is fully allowable under Sections 102(b) and 103(a) in view of the cited art.

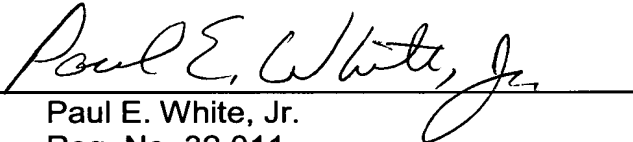
In view of the above and the attached Rule 132 Declaration, the applicants submit that this application is in condition for allowance and a Notice to that effect is respectfully requested.

The applicants take this opportunity to submit a new Information Disclosure Statement (IDS) with PTO Form 1449, the listed document thereon and the required fee. Please consider the attached IDS with cited document.

Allowance of this application is respectfully requested.

Respectfully submitted,

MANELLI DENISON & SELTER, PLLC

By 
Paul E. White, Jr.
Reg. No. 32,011
Tel. No.: (202) 261-1050
Fax No.: (202) 887-0336

2000 M Street, N.W.
Seventh Floor
Washington, D.C. 20036-3307
(202) 261-1000